REPLACEMENT PARAGRAPHS IN CLEAN FORM
SUBMITTED IN ACCORDANCE WITH 37 CFR 1.121(b)(1)(ii)
IN RESPONSE TO OFFICE ACTION OF 15 MARCH 2002

IN THE SPECIFICATION

Please delete and replace the first paragraph on page 21, extending into page 22, with the following rewritten paragraph:

In another embodiment, the shape of the engaged area of the fastening element(s) may be optimized for a higher resistance to peel mode disengagement in the yz-plane and a lower resistance to peel mode disengagement in the xz-plane. Figures 4A through 4C, for example, show possible shapes of fastening elements that may be used in a fastening system. Figure 4A shows a typical rectangular-shaped fastening element. Figure 4B shows one embodiment of a fastening element of the present invention in which the shape of the engaged area of the fastening element has been designed in order to decrease the resistance to peel mode disengagement in the yz-plane as peel progresses from a longitudinally inboard edge A to a longitudinally outboard edge B by decreasing the effective x-dimension along at least a portion of the path from the longitudinally inboard edge A to the longitudinally outboard edge B. Thus, the resistance to yz-plane peel is initially higher at edge A and may decrease at some point between edge the longitudinally inboard A and edge the longitudinally inboard B. The initial peel resistance at a laterally outboard edge C, however, has been decreased by shaping the laterally outboard edge C so that the effective dimension in the y-direction increases for at least a portion of the path from the leterally outboard edge C to a laterally inboard edge D. For example, as shown in Figure 4B, y-dimension Y1 is smaller than Y2 and Y3. Thus resistance to peel in the xz-plane is initially lower at the laterally outboard edge C, then may increase along the path to the laterally inboard edge D. In one particular embodiment, the surface fastening system 40 may include a hook and loop fastener in which at least the engaged area in common between the hook element and the loop element are shaped as the fastening element 56 shown in Figure 4B when configured as intended for use of the article. That is, in general, the effective length of dimension Y increases along at least a portion of the path from the laterally outboard edge C to the laterally inboard edge D, and the effective dimension X decreases along at least a portion of the path from the longitudinally inboard edge A to the longitudinally outboard edge B.

In certain embodiments such as shown in Figure 4C, the effective dimension X may initially decrease or increase along a portion of the path from a longitudinally inboard edge A' to a longitudinally outboard edge B' then increase or decrease along another portion of the path from the longitudinally inboard edge A' to the longitudinally outboard edge B'.

Please delete and replace a second paragraph on page 12, extending into page 23, with the following rewritten paragraph:

Figures 6, 7 and 8 show embodiments in which the peel resistance of the surface fastening system 40 may be selectively enhanced. In Figures 6 and 7, for example, all or a portion of a longitudinal inboard edge 66 of fastening element 68 may be unjoined from the underlying structure of the article 20. In these figures, the portion of the fastening element 68 joined to the underlying structure of the article 20 is shown cross-hatched. In this embodiment, all or a portion of the longitudinal inboard edge 66 of the fastening element 68 is free to pull away from the underlying structure of the article 20. This may increase the peel resistance of the surface fastening system 40. Without being bound by theory, it is believed that as the edge pulls away from the underlying structure of the article 20, the disengagement mode shifts gradually away from a peel mode to a shear mode of disengagement. In many surface fasteners such as a hook and loop fastener, it is more difficult to disengage the fastener in shear mode than in peel mode. Thus, the resistance to disengagement of the fastener to a force in the yz-plane may be increased. In another embodiment, such as shown in Figure 8, a portion 72 of the fastening element 70 other than the edge may be unjoined from the underlying structure of the article 20. In this fastener, the peel resistance in this portion 72 of the fastener may be selectively increased. In addition, in embodiments in which at least a portion of fastening element 68 is joined to a carrier web and at least a portion of the carrier web and/or fastening element 68 may be unjoined from the underlying structure of the article 20, at least a portion of the carrier web or the fastening element 68 can be extensible or elastomeric. For example, a vacuum formed elastomer material such as described in United States Patent Application Serial No. 08/816,106 filed on March 14, 1997, which is incorporated by reference, may be used. Any other extensible and/or elastomeric/elastic materials, including those previously referenced herein, may also be used. Embodiments have also been contemplated in which at least a portion of fastening element 68 is joined to a carrier web, and at least a portion of the carrier web and/or fastening element 68 may be unjoined from the underlying structure of the article 20 and at least a portion of the carrier web is extensible or elastomeric.